

**REMARKS**

Claims 5, 7, 10, 13-16, 20, 22, 24, 27, 30, 32-33, and 44-46 were previously cancelled without prejudice or disclaimer. Claim 2 has been cancelled without prejudice or disclaimer in the current response. Claims 1, 4, 9, 11, 23, and 38 have been amended. No new matter has been added. Accordingly, claims 1, 3, 4, 6, 8, 9, 11, 12, 17-19, 21, 23, 25, 26, 28, 29, 31, 34-43, 47, and 48 are pending.

**Claims 1, 3, 11, 12, 21, 23, 26, 29, 31, 34-38, and 48 are Allowable**

The Office has rejected claims 1-3, 11, 12, 21, 23, 26, 29, 31, 34-38, and 48, under 35 U.S.C. §103(a), as being unpatentable over U.S. Published Application No. 2003/0117501 (“Shirakawa”) in view of U.S. Patent No. 5,898,459 (“Smith”) and further in view of U.S. Published Application No. 2003/0117488 (“Pierce”). Claim 2 has been cancelled without prejudice or disclaimer. Assignee respectfully traverses the remainder of the rejections.

**Claims 1, 3, 35, 36, and 48**

The cited portions of the above-cited references do not disclose or suggest the specific combination of claim 1. For example, the cited portions of the above-cited references do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Shirakawa describes a camera device that captures a plurality of images and superimposes them to output image data of a superimposed image. The images are captured by a plurality of cameras. A processor superimposes the plurality of images to produce the superimposed image. *See* Shirakawa, Abstract. The cited portions of Shirakawa are silent with regard to a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions

of Shirakawa do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Smith describes a multi-camera programmable pan-and-tilt apparatus comprising a base and a camera mechanism having a first camera and a second camera, where the second camera includes a zoom mechanism for varying the zoom magnification of the second camera. The apparatus further has a pan-and-tilt mechanism for moving the cameras with respect to the base and a video switch receiving the video outputs of the cameras and selecting one for view. *See* Smith, Abstract. The cited portions of Smith are silent with regard to a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Smith do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Pierce describes an imaging system comprising a plurality of first image capture devices. Overlapping rectilinear images are captured and halved, with the left halves being stitched and transformed into a first equirectangular image and the right halves being stitched and transformed into a second equirectangular image. The first equirectangular image and the second equirectangular image are displayed in a stereoscopic orientation to produce a stereoscopic equirectangular image. *See* Pierce, Abstract. Pierce also describes producing a 360-degree panoramic monographic image. *See* Pierce, paragraph [0049]. However, in Pierce, a plurality of lenses is shown equally spaced across the surface of a spherical camera body to produce the 360-degree panoramic image. *See* Pierce, FIG. 1, paragraph [0022]. A spherical

mounting surface is not the same as a mounting surface having a planar geometry. Accordingly, the cited portions of Pierce do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, and Pierce, individually or in combination, fail to disclose or suggest at least one element of claim 1. Hence, claim 1 is allowable. Claims 3, 35, 36, and 48 are allowable, at least by virtue of their dependence from claim 1.

#### Claims 11, 21, and 34

The cited portions of the above-cited references do not disclose or suggest the specific combination of claim 11. For example, the cited portions of the above-cited references do not disclose or suggest a plurality of image modules including at least a first image module and a second image module, where a selector, the first image module, and the second image module are integrated into a single electronic device; and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry, where fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

As explained above, the cited portions of Shirakawa do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Shirakawa do not disclose or suggest a plurality of image modules including at least a first image module and a second image module, where a selector, the first image module, and the second image module are integrated into a single electronic device; and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a

generally planar geometry, where fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

As explained above, the cited portions of Smith do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Smith do not disclose or suggest a plurality of image modules including at least a first image module and a second image module, where a selector, the first image module, and the second image module are integrated into a single electronic device; and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry, where fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

As explained above, the cited portions of Pierce describe a plurality of lenses equally spaced across the surface of a spherical camera body to produce the 360-degree panoramic image. Accordingly, the cited portions of Pierce do not disclose or suggest a plurality of image modules including at least a first image module and a second image module, where a selector, the first image module, and the second image module are integrated into a single electronic device; and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry, where fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, and Pierce, individually or in combination, fail to disclose or suggest at least one element of claim 11. Hence, claim 11 is allowable. Claims 21 and 34 are allowable, at least by virtue of their dependence from claim 11.

Claims 23, 26, 29, 31, 37, and 38

The cited portions of the above-cited references fail to disclose or suggest the specific combination of claim 23. For example, the cited portions of the above-cited references do not disclose or suggest receiving first image information that represents a first view obtained from a first digital image sensor of a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, receiving second image information that represents a second view obtained from a second digital image sensor of the plurality of digital

image sensors, where the first digital image sensor and the second digital image sensor are integrated into a single electronic device, where the single electronic device is mounted to a surface that has a planar geometry, and where the fields of view of the plurality of digital image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

As explained above, the cited portions of Shirakawa do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Shirakawa do not disclose or suggest receiving first image information that represents a first view obtained from a first digital image sensor of a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, receiving second image information that represents a second view obtained from a second digital image sensor of the plurality of digital image sensors, where the first digital image sensor and the second digital image sensor are integrated into a single electronic device, where the single electronic device is mounted to a surface that has a planar geometry, and where the fields of view of the plurality of digital image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

As explained above, the cited portions of Smith do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Smith do not disclose or suggest receiving first image information that represents a first view obtained from a first digital image sensor of a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, receiving second image information that represents a second view obtained from a second digital image sensor of the plurality of digital image sensors, where the first digital image sensor and the second digital image sensor are integrated into a single electronic device, where the single electronic device is mounted to a surface that has a planar geometry, and where the fields of view of the plurality of digital image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

As explained above, the cited portions of Pierce describe a plurality of lenses equally spaced across the surface of a spherical camera body to produce the 360-degree panoramic

image. Accordingly, the cited portions of Pierce do not disclose or suggest receiving first image information that represents a first view obtained from a first digital image sensor of a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, receiving second image information that represents a second view obtained from a second digital image sensor of the plurality of digital image sensors, where the first digital image sensor and the second digital image sensor are integrated into a single electronic device, where the single electronic device is mounted to a surface that has a planar geometry, and where the fields of view of the plurality of digital image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

Therefore, the cited portions of Shirakawa, Smith, and Pierce, individually or in combination, fail to disclose or suggest at least one element of claim 23. Hence, claim 23 is allowable. Claims 26, 29, 31, 37 and 38 are allowable at least by virtue of their dependence from claim 23.

#### **Claim 4 is Allowable**

The Office has rejected claim 4, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce, and further in view of U.S. Pat. No. 6,791,076 ("Webster"). Assignee respectfully traverses the rejection.

Claim 4 depends from claim 1. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 1. The cited portions of Webster fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. Webster describes an image sensor package including an image sensor, a window, and a molding. *See Webster, Abstract.* The cited portions of Webster do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Webster do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of

a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Webster, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 4 depends. Hence, claim 4 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claim 6 is Allowable**

The Office has rejected claim 6, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce, and further in view of U.S. Pat. No. 7,002,621 ("Adair"). Assignee respectfully traverses the rejection.

Claim 6 depends from claim 1. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 1. The cited portions of Adair fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. Adair describes a reduced area imaging device provided for use with a communication device, such as a wireless/cellular phone. *See* Adair, Abstract. The cited portions of Adair do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Adair do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Adair, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 6 depends. Hence, claim 6 is allowable, at least by virtue of its dependence from an allowable claim.

**Claims 18 and 39 are Allowable**

The Office has rejected claims 18 and 39, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce, and further in view of *EMS-Vision: Gaze Control in Autonomous Vehicles* (“Pellkofer”). Assignee respectfully traverses the rejections.

Claim 18 depends from claim 11. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 11. The cited portions of Pellkofer fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. Pellkofer describes an approach to an optimal gaze control system for autonomous vehicles. *See* Pellkofer, Abstract. The cited portions of Pellkofer do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Pellkofer do not disclose or suggest a plurality of image modules including at least a first image module and a second image module, where a selector, the first image module, and the second image module are integrated into a single electronic device; and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry, where fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Pellkofer, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 18 depends. Hence, claim 18 is allowable, at least by virtue of its dependence from an allowable claim.

Claim 39 depends from claim 1. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 1. The cited portions of Pellkofer fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. Pellkofer describes an approach to an optimal gaze control system for autonomous vehicles. *See* Pellkofer, Abstract. The cited portions of Pellkofer do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Pellkofer do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second



image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Pellkofer, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 39 depends. Hence, claim 39 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claim 19 is Allowable**

The Office has rejected claim 19, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce, and further in view of U.S. Published Application No. 2001/0022627 (“Bernhardt”). Assignee respectfully traverses the rejection.

Claim 19 depends from claim 11. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 11. The cited portions of Bernhardt fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. Bernhardt describes a video surveillance apparatus having a dome camera with a housing and a first dome in which a video camera with a lens is disposed which is adjustable about a vertical axis of rotation and a horizontal swiveling axis. *See* Bernhardt, Abstract. The cited portions of Bernhardt do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Bernhardt do not disclose or suggest a plurality of image modules including at least a first image module and a second image module, where a selector, the first image module, and the second image module are integrated into a single electronic device; and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry, where fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Bernhardt, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 19 depends. Hence, claim 19 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claims 8, 25, and 28 are Allowable**

The Office has rejected claims 8, 25, and 28, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce, and further in view of U.S. Pat. No. 7,023,913 ("Monroe"). Assignee respectfully traverses the rejections.

Claim 8 depends from claim 1. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 1. The cited portions of Monroe fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. Monroe describes a fully digital camera system that provides high-resolution still image and streaming video signals via a network to a centralized server supported security and surveillance system. The camera employs, or connects to, a variety of sensors other than the traditional image sensor, such as a motion sensor. *See* Monroe, Abstract. The cited portions of Monroe do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Monroe do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Monroe, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 8 depends. Hence, claim 8 is allowable, at least by virtue of its dependence from an allowable claim.

Claims 25 and 28 depend from claim 23. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 23. The cited portions of Monroe fail to disclose or suggest the elements of claim 23 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. As explained above, the cited portions of Monroe do not disclose or suggest a plurality of image sensors having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Monroe do not disclose or suggest receiving first image information that represents a first view obtained from a first digital image sensor of a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, receiving second image information that represents a second view obtained from a second digital image sensor of the plurality of digital image sensors, where the first digital image sensor and the second digital image sensor are integrated into a single electronic device, where the single electronic device is mounted to a surface that has a planar geometry, and where the fields of view of the plurality of digital image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Monroe, individually or in combination, fail to disclose or suggest at least one element of claim 23, from which claims 25 and 28 depend. Hence, claims 25 and 28 are allowable, at least by virtue of their dependence from an allowable claim.

#### **Claim 40 is Allowable**

The Office has rejected claim 40, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce in view of Pellkofer, and further in view of Monroe. Assignee respectfully traverses the rejection.

Claim 40 depends from claim 39, which depends from claim 1. As explained above regarding the rejection of claim 39, the cited portions of Shirakawa, Smith, Pierce, and Pellkofer fail to disclose or suggest at least one element of claim 1. The cited portions of Monroe fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, Pierce, and Pellkofer. As explained above, the cited portions of Monroe do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees.

Accordingly, the cited portions of Monroe do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, Pierce, Pellkofer, and Monroe, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 40 depends. Hence, claim 40 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claims 17, 41 and 42 are Allowable**

The Office has rejected claims 17, 41, and 42, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce, and further in view of U.S. Pat. No. 7,015,954 ("Foote"). Assignee respectfully traverses the rejections.

Claim 17 depends from claim 11. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 11. The cited portions of Foote fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. Foote describes a camera array that captures component images which are combined into a single scene from which "panning" and "zooming" within the scene are performed. A scene captured by the camera array is zoomed or selectively steered to an area of interest. This zooming or steering, being done in the digital domain, is performed nearly instantaneously when compared to cameras with mechanical zoom and steering functions. *See* Foote, Abstract. Foote further describes that a motion analysis may serve to control a virtual camera to select the portion of a panoramic image that contains a moving object. *See* Foote, col. 13, lines 63-65. The cited portions of Foote do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Foote do not disclose or suggest a plurality of image modules including at least a first image module

and a second image module, where a selector, the first image module, and the second image module are integrated into a single electronic device; and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry, where fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Foote, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 17 depends. Hence, claim 17 is allowable, at least by virtue of its dependence from an allowable claim.

Claims 41 and 42 depend from claim 1. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 1. The cited portions of Foote fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. As explained above, the cited portions of Foote do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Foote do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, and Foote, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claims 41 and 42 depend. Hence, claims 41 and 42 are allowable, at least by virtue of their dependence from an allowable claim.

**Claim 9 is Allowable**

The Office has rejected claim 9, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce in view of Monroe, and further in view of U.S. Published Application No. 2004/0085445 ("Park"). Assignee respectfully traverses the rejection.

Claim 9 depends from claim 8, which depends from claim 1. As explained above regarding the rejection of claim 8, the cited portions of Shirakawa, Smith, Pierce, and Monroe fail to disclose or suggest at least one element of claim 1. The cited portions of Park fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, Pierce, and Monroe.

Park describes a video security system and a method for operating the video security system. The video security system includes a video camera including circuits for using encrypting data or inserting a security signal, thereby generating a secured video signal for transmission. *See* Park, Abstract. The cited portions of Park do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Park do not disclose or suggest a plurality of image sensor lens modules including at least a first image sensor lens module and a second image sensor lens module, a shared image processing engine integrated into a single electronic device with the first image sensor lens module and the second image sensor lens module, and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry and where fields of view of a plurality of image sensor lens modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, Pierce, Monroe, and Park, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 9 depends. Hence, claim 9 is allowable, at least by virtue of its dependence from an allowable claim.

**Claim 43 is Allowable**

The Office has rejected claim 43, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce in view of Pellkofer, and further in view of U.S. Pat. No. 7,425,984 ("Chen"). Assignee respectfully traverses the rejection.

Claim 43 depends from claim 11. As explained above, the cited portions of Shirakawa, Smith, Pierce, and Pellkofer fail to disclose or suggest at least one element of claim 11. The cited portions of Chen fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, Pierce, and Pellkofer. Chen describes a compound camera system for generating an enhanced virtual image having a large depth-of-field. *See* Chen, Abstract. The cited portions of Chen do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Chen do not disclose or suggest a plurality of image modules including at least a first image module and a second image module, where a selector, the first image module, and the second image module are integrated into a single electronic device; and a support having an exterior surface that comprises a mounting surface to mount the single electronic device, where the support has a generally planar geometry, where fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, Pierce, Pellkofer, and Chen, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 43 depends. Hence, claim 43 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claim 47 is Allowable**

The Office has rejected claim 47, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pierce, and further in view of Park. Assignee respectfully traverses the rejection.

Claim 47 depends from claim 23. As explained above, the cited portions of Shirakawa, Smith, and Pierce fail to disclose or suggest at least one element of claim 23. The cited portions of Park fail to disclose or suggest the elements of claim 23 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pierce. As explained above, the cited portions of Park do not disclose or suggest a plurality of image sensors having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Park do not disclose or suggest receiving first image information that represents a first view obtained from a first digital image sensor of a plurality of digital image sensors, where

each of the plurality of digital image sensors includes a field of view, receiving second image information that represents a second view obtained from a second digital image sensor of the plurality of digital image sensors, where the first digital image sensor and the second digital image sensor are integrated into a single electronic device, where the single electronic device is mounted to a surface that has a planar geometry, and where the fields of view of the plurality of digital image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

Therefore, the cited portions of Shirakawa, Smith, Pierce, and Park, individually or in combination, fail to disclose or suggest at least one element of claim 23, from which claim 47 depends. Hence, claim 47 is allowable, at least by virtue of its dependence from an allowable claim.

### **CONCLUSION**

Assignee has pointed out specific features of the claims not disclosed, suggested, or rendered obvious by the references applied in the Office Action. Accordingly, Assignee respectfully request reconsideration and withdrawal of each of the objections and rejections, as well as an indication of the allowability of each of the pending claims.

Any changes to the claims in this response that have not been specifically noted to overcome a rejection based upon the cited references should be considered to have been made for a purpose unrelated to patentability and no estoppel should be deemed to attach thereto.


The Examiner is invited to contact the undersigned attorney at the telephone number listed below if such a call would in any way facilitate allowance of this application.



The Commissioner is hereby authorized to charge any fees, which may be required, or credit any overpayment, to Deposit Account Number 50-2469.

Respectfully submitted,

8-8-2011  
Date

  
Jeffrey G. Toler, Reg. No. 38,342  
TOLER LAW GROUP  
8500 Bluffstone Cove, Suite A201  
Austin, TX 78759  
Telephone: (512) 327-5515  
Facsimile: (512) 327-5575